

FEDOROV, Ye.Ye., professor; PREDTECHENSKIY, P.P., and others.

Discussion of the report (in the form of debates) [of the current state of climatological research and methods of developing it].  
Inform.stor. GUGMS no.3/4:26-154 '54. (Card 3) (MIRA 8:3)

18. Dal'nevostochnyy nauchno-issledovatel'skiy gidrometeorologicheskiy institut (for Sokolov). 19. Institut geologii i geografii Akademii nauk Litovskoy SSR (for Styro). 20. Rostovskoe upravlenie gidrometsluzhby (for Temnikova). 21. Morskoy gidrofizicheskiy Institut Akademii nauk SSSR (for Dmitriyev). 22. Vsesoyuznyy institut rasteniyevodstva (for Malyugin). 23. Akademiya nauk Estonskoy SSR (for Liedemaa). 24. Akademiya nauk Armyanskoy SSR (for Bagdasaryan). 25. Leningradskiy gidrometeorologicheskiy institut (for Milevskiy).  
(Continued on next card)

FEDOROV, Ye.Ye., professor; PREDTECHENSKIY, P.P., and others.

Discussion of the report (in the form of debates) [of the current state climatological research and methods of developing it]. Inform.sbor.  
GUGMS no.3/4:26-154 '54. (Card 4) (MLRA 8:3)

26. Gosudarstvennyy gidrologicheskiy institut (for Bochkov). 27. Kazakhskiy nauchno-issledovatel'skiy gidrometeorologicheskiy institut (for Uteshev). 28. Upravlenie gidrometsluzhby Armyanskoy SSR (for Nor-sesyan). 29. Leningradskoye upravleniye gidrometsluzhby (for Mikhaylov, Devyatkov). 30. Tbilisskiy gosudarstvennyy universitet (for Tsomaya). 31. Tsentral'naya aerologicheskaya observatoriya (for Shmeter).  
(Climatology)

SOKOLOV, V.N.

Results of using calculating-analytic machines for processing  
synoptic and climatological data. Trudy TSNIGMA no.2:3-45 '55.  
(MIRA 9:7)

(Meteorology) (Calculating machines)

Name: SOKOLOV, V. N.

Dissertation: Synoptic climatological characteristics of Moscow; interpretations using calculating machines

Degree: Cand Geog Sci

Affiliation: Main Administration of the Hydrometeorological Service of the Council of Ministers USSR, Central Inst of Weather Forecasting

Defense Date, Place: 1956, Moscow

Source: Knizhnaya Letopis', No 1, 1957

SOKOLOV, V.H.

Blank punched cards for basic meteorological observations.  
Trudy NIIAK no.1:3-16 '57. (MIRA 11:10)  
(Punched card systems--Meteorology)



ACC NR: AP70C1044

SOURCE CODE: UR/0203/66/006/003/0586/0587

AUTHOR: Charakhch'yan, A. N.; Sokolov, V. N.; Charakhch'yan, T. N. 34/5

ORG: Physics Institute im. P. N. Lebedeva, AN SSSR (Fizicheskiy institut AN SSSR);  
Institute of Nuclear Physics, Moscow State University (Moskovskiy gosudarstvennyy  
universitet, Institut yadernoy fiziki)

TITLE: Interesting case of fluctuation of cosmic ray intensity in the stratosphere  
on 3 December 1964

SOURCE: Geomagnetizm i aeronomiya, v. 6, no. 3, 1966, 586-587

TOPIC TAGS: cosmic ray intensity, radiosonda, geomagnetic field

ABSTRACT: The intensity of stratospheric cosmic rays varies continuously and in most cases these changes occur in the range of several percent. The case described in this paper is said to be of particular interest. The data of one of three measurements of stratospheric cosmic rays on 3 December 1964 over Dolgoprudnyy were higher than ordinary. The data fell on the curve obtained for cosmic ray intensity at Olen'ya station near Karmansk. The magnetic rigidity cutoffs of primary cosmic rays for Dolgoprudnyy and Olen'ya are  $\sim 2.2$  and  $0.5$  GeV respectively. The measurements were made using cosmic ray radiosondes. The possibility of instrument errors was excluded. On the basis of the character of the measured fluctuation it is

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UDC: 523.165

09.24 00.56

1 071000-7  
ACC NR: AP7001044

postulated that there was a decrease of the rigidity cutoff of cosmic rays over Dolgoprudnyy to  $\sim 0.5$  BeV/sec. However, such a change would correspond to a very large and rather stable decrease of the geomagnetic field of about 0.1 oe, but this apparently did not occur. It therefore is necessary to find a more probable explanation of the described case. Orig. art. has: 1 figure. [JPRS: 36,794]

SUB CODE: 04, 08 / SUBM DATE: 14Aug65 / ORIG REF: 001

Card 2/2 *LC*



SOKOLOV, V.N.; KORLOV, V.V.

Raising the productive capacity of liqueur and vodka plants. Spirit.  
prom. 23 no.5:22-24 '57. (MLR 10:3)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut spirtovoy promysh-  
lennosti (for Sokolov). 2. MII po trudu pri Moskovskom likero-vodoch-  
nom zavode (for Korlov).  
(Bottle washing) (Bottling machinery)

Schickel v. V.A.

SOKOLOV, V. N. GORLOV, V. V.

Ways of increasing the productivity of labor in liquor and vodka plants. Spirt. prom. 23 no.8:33-36 '57. (MIRA 11:1)  
(Liquor industry--Production standards)

SOV/115-59-8-11/33

28(2)

AUTHOR:

Sokolov, V. N.

TITLE:

A Method for Rapid Determination of a Solution Concentration

PERIODICAL: Izmeritel'naya tekhnika, 1959, Nr 8, pp 25 - 26  
(USSR)

ABSTRACT:

The torsion balances produced by the plant "Tekstil'-pribor" in Moscow may be converted for determining rapidly the concentration of solutions without that a considerable quantity of liquid is required for this purpose. Such a conversion was performed at the Leningradskiy tekhnologicheskii institut (Leningrad Technological Institute), where the torsion balances were used for determining an alcohol solution in water. The torsion balances are shown in Figure 1. For this purpose, a hollow sphere, having a volume of 1.8 cm<sup>3</sup> and a weight of 1.9 g, was suspended on one balance arm. When determining the concentration of water-alcohol solutions an accuracy of 0.0006 g/cm<sup>3</sup> was achieved, which corresponds to a solution concentration change of 0.5% (by weight). The hollow

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SOV/115-59-8-11/33

A Method for Rapid Determination of a Solution Concentration

sphere was manufactured by precipitating copper on a graphite-wax mold. A hole was drilled into the copper and the wax was removed by heating. The hole was soldered. The solution to be measured is filled into a glass container of 32 mm diameter and 40 mm height. About 20 milliliter of solution are required. At a temperature of 20°C, one analysis may be performed within 1 minute. A glass sphere, silver-plated on the outside, may also be used. The required weight is obtained by precipitating nickel on the silver surface. There is 1 photograph.

Card 2/2

BYCHKOV, B.K.; SOKOLOV, V.N.

Efficient method for the contact treatment of sirup with activated carbon for the decolorization of sugar liquors. Sakh. prom. 33  
no.5:52-53 My '59. (MIRA 12:7)

1. Beslanovskiy maisovvy zavod.  
(Beslan---Sirups) (Carbon, Activated)

SOKOLOV, V.N.

Utilization of basic resources and productive capacities of  
the distilling industry. Spirt. prom. 25 no.5:31-34 '59.  
(MIRA 12:10)

(Distilling industries)

SOKOLOV, V.N.; TOLMACHEVA, L.I.

Eliminating inefficiency in the delivery of alcoholic beverages to  
Moscow Province. Spirt. prom. 27 no.6:33-34 '61. (MIRA 14:9)  
(Moscow Province--Liquor industry)

SOKOLOV, V.N.; TOLMACHEVA, L.I.

Determining the extent of mechanization in the liqueur and vodka industry. Spirt.prom. 28 no.2:30-33 '62. (MIRA 15:3)

1. TSentral'nyy nauchno-issledovatel'skiy institut spirtovoy promyshlennosti.

(Liquor industry)



NOVOSELOK, F.B.; SOKOLOV, V.N.; APUKHTINA, N.P.; SHLYAKHTER, R.A.

Mechanism of the rupture of S-S bonds in polysulfide polymers.  
Vysokom.soed. 7 no.10:1726-1730 0 '65.

(MIRA 18:11)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut sinteticheskogo kauchuka.

SOKOLOV, V.N.; RAPPOPORT, L.Ya.; PODDUBNYI, I.Ya.; APUKHTINA, N.P.

Role of water in the synthesis of urethane polymers on the basis of polyesters. Vysokom.soed. 7 no.7:1258-1263 J1 '65.

(MIRA 18:8)

1. Nauchno-issledovatel'skiy institut sinteticheskogo kauchuka imeni Lebedeva.

SOKOLOV, V.N.

Changing the order of flow of parts. leg.prom.15 no.1:47 Ja '55.  
(MIRA 8:3)

1. Nachal'nik OTK fabriki No.1 "Proletarskaya pobeda."  
(Shoe industry)

SOKOLOV, V.N., inzhener

~~\_\_\_\_\_~~  
Mechanization of labor consuming tasks. Leg.prom.15 no.7:51-52  
Jl'55. (MIRA 8:10)

(Shoe machinery)

SKOLOV, V.N., inzh.

Method for regulating the fixing springs of SEP-55 drives.  
Avtom. telem. i sviaz' 8 no.2:26-27 F '64. (MIRA 17:6)

SOKOLOV, V.N.

Expand the introduction of automatization in construction  
for the transportation industry. Transp.stroi. 9 no.10:  
9-13 0 '59. (MIRA 13:2)

1. Glavnyy spetsialist Tekhnicheskogo upravleniya.  
(Automatic control) (Building machinery)  
(Earthmoving machinery)

SOKOLOV, V.N.

Machine unit for the continuous production of foam plastics.  
Plast.massy no.8:57-58 '61. (MIRA 14:7)  
(Plastics)

L 24833-65 EWT(m)/EPF(c)/EWP(j)/T Pc-4/Pr-4 RM

ACCESSION NR: AP4049486

S/0020/64/159/002/0365/0368

AUTHOR: Bresler, L.S., Krcpacheva, Ye. N., Poddubnyy, I. Ya., Sokolov, V.N.

TITLE: Mechanism of polymerization of dienes under the influence of complex cobalt catalysts

SOURCE: AN SSSR. Doklady\*, v. 159, no. 2, 1964, 365-368

TOPIC TAGS: diene polymerization, cobalt catalyst, butadiene polymerization, cationic polymerization, polymerization catalyst, polyisoprene, polybutadiene

ABSTRACT: This work was undertaken to clear up contradictions in the literature: Various catalyst systems were employed in the polymerization of isoprene and butadiene in benzene:  $\text{LiC}_4\text{H}_9$ ;  $\text{AlCl}_2\text{C}_2\text{H}_5$  with cocatalyst  $\text{HCl}$ ;  $\text{TiCl}_4$  with cocatalyst  $\text{HCl}$  or  $\text{H}_2\text{O}$ ;  $\text{TiCl}_4 + \text{Al}(\text{iso-C}_4\text{H}_9)_3$ , and  $\text{Co}$  naphthenate or an alcoholic complex of cobalt chloride in the presence of  $\text{AlCl}_3(\text{iso-C}_4\text{H}_9)_2$ . To interrupt the polymerization,  $\text{C}_2\text{H}_5\text{OH}^3$  (45 and 700 moles/mole) was added in amounts of 10-20 moles per mole of catalyst. Results show that the polymer formed under the influence of an anionic catalyst is radioactive during decomposition with  $\text{C}_2\text{H}_5\text{OH}^3$  and its radioactivity during deactivation with  $\text{CH}_3\text{C}^{14}\text{H}_2\text{OH}$  is connected solely with the carbonyl groups. However, polyisoprene obtained in the presence

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L 24833-65

ACCESSION NR: AP4049486

of cationic catalysts adds tritium as well as tagged alkoxyl. The presence of a tag in a polymer after decomposition of the catalyst by  $\text{ROH}^3$  and its absence when treated with alkoxyl-tagged alcohol cannot yet serve as proof of the anionic mechanism of chain growth. However, when the polymer adds a tagged alkoxyl, the chain can carry only a positive charge, i.e., polymerization is cationic whether H from  $\text{ROH}^3$  adds to the polymer or not. Such a case was observed during polymerization of dienes with Co catalysts. During de-activation of Co catalysts with anhydrous  $\text{C}_2\text{H}_5\text{OH}^3$ , the polymer showed no radioactivity; in the presence of Co naphthenate containing water, radioactive polybutadiene was obtained. Diene polymerization in the presence of Co catalyst systems thus has a cationic mechanism. It is probable that initiation proceeds by the addition of a free proton, since during the use of anhydrous  $\text{ROH}^3$ , isotopic exchange of tritium with polymer was not observed. Orig. art. has: 2 tables and 6 chemical equations.

ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy institut sinteticheskogo kauchuka im. S. V. Lebedeva (All-Union Scientific Research Institute of Synthetic Rubber)

SUBMITTED: 21May64

ENCL: 00

SUB CODE: OC

NO REF SOV: 000

OTHER: 005

Card 2/2

513830

11.2215

24044  
S/020/61/138/003/016/017  
B103/B208

AUTHORS: Sokolov, V. N., Poddubnyy, I. Ya., Perekalin, V. V., and  
Yevdokimov, V. F.

TITLE: Polymerization of nitroethylene under the action of  $\gamma$ -radiation

PERIODICAL: Doklady Akademii nauk SSSR, v. 138, no. 3, 1961, 619-620

TEXT: The authors devised methods for the industrial production of high-molecular nitroethylene under the action of  $\gamma$ -radiation since in this case products are obtained which are as pure as the initial monomers. Other methods with initiator and solvent yielded so far only powdery products contaminated by initiator and solvent.  $\text{Co}^{60}$  was used as radiation source, the apparatus is described by A. Kh. Breger et al. (Ref. 9: Deystviye ioniziruyushchikh izlucheniye na neorganicheskiye i organicheskiye polimer-nyye sistemy (Effect of ionizing radiation on inorganic and organic polymer systems), Izd. AN SSSR, 1958). The initial nitroethylene was obtained by dehydration of 1-nitro-ethanol-2 with phthalic anhydride. Fractions with a boiling point of  $36^{\circ}\text{C}/100$  mm Hg were isolated from the monomer by

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S/020/61/138/003/016/017

B103/B208

Polymerization of nitroethylene ...

repeated fractionation. Hot nitrogen was bubbled through glass ampuls which were then filled with freshly distilled nitroethylene. The occluded atmospheric oxygen was removed by the usual freezing up and melting. The ampuls sealed in vacuo were irradiated at 20°C, and the monomer was distilled off in vacuo after opening. At the beginning of irradiation (dose  $1 \cdot 10^6$  r), a turbidity was observed in the monomer which had hitherto been as clear as water. At a dose of  $5 \cdot 10^6$  r a white precipitate results which is identical with the polymer resulting under the action of organic bases. On further irradiation, the pasty monomer-polymer mixture is converted to a transparent, pale-yellow polymer block. This is apparently related to secondary addition reactions of growing polymer chains to the polymer already formed, and is accompanied by an increase of its molecular weight. At doses  $> 0.3$  Mr/hr no block polymer is formed. In this case the polymer remains powdery up to a 100% conversion, and turns light-brown. The formation of the block polymer being a very complicated physico-chemical process depending on many factors, a powder is formed in some cases even with a 100% conversion. The polymerization of partly

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S/020/61/138/003/016/017  
B103/B208

Polymerization of nitroethylene ...

polymerized samples continues also after irradiation is finished. This suggests the formation of rather long-live polymer radicals under the action of  $\gamma$ -radiation (Fig. 2). Also in this case block-polynitroethylene results. The polymerization is inhibited by hydroquinone and oxygen which confirms the radical nature of this process. The polymer is insoluble in common solvents, well soluble in N,N-dimethyl formamide. Its intrinsic viscosity in this solvent is 0.38 which corresponds to a molecular weight of 38,000. Its density is  $d_{20} 1.535$ , the decomposition temperature  $150^{\circ}\text{C}$ . No denitrification ( $-\text{CH}_2 - \text{CHNO}_2$ )<sub>n</sub> takes place during irradiation. The crystalline phase is absent (X-ray data by S. G. Strunskiy). An intense narrow halo and a weak broad halo correspond to the parameters of the short-range order  $5.15 \text{ \AA}$  and  $3.73 \text{ \AA}$ . Under the action of  $\gamma$ -radiation nitroethylene may be copolymerized with other unsaturated nitro compounds such as 1,4-dinitro-butadiene-1,3. There are 3 figures and 9 references: 3 Soviet-bloc and 6 non-Soviet-bloc. The two most important references to English-language publications read as follows: Ref. 4: D. Vofsi, A. Katchalsky. J. Polym. Sci., 26, 127 (1957); Ref. 7: G. Buckley,

Card 3/5

Polymerization of nitroethylene ...

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S/020/61/138/003/016/017  
B103/B208

C. Scaife. Brit. Pat. 595282, 1947; Chem. Abstr., 42, 37775 (1948).

PRESENTED: December 20, 1960, by N. N. Semenov, Academician

SUBMITTED: December 17, 1960

Card 4/5

SOKOLOV, V.N.; GELLIS, Yu.K.

Hydrodynamics of a bubbling shell-and-tube reactor.  
Khim.prom. no.10:757-761 0 162. (MIRA 15:12)

1. Leningradskiy tekhnologicheskii institut imeni  
Lensoveta.

(Chemical reactors)  
(Hydrodynamics)

YAKHNICH, I.M., prof.; SOKOLOV, V.N., nauchnyy sotrudnik

Radiographic study of stomach function and morphology in some blood diseases. Akt.vop.perel.krovi no.4:213-214 '55. (MIRA 13:1)

1. Rentgenologicheskoye otdeleniye Leningradskogo instituta perelivaniya krovi (zav. - starshiy nauchnyy sotrudnik D.S. Kuz'min)  
(STOMACH--RADIOGRAPHY) (BLOOD--DISEASES)

SOLODOV V.V.

SOLODOV, V.V.

New baby foods. Vop. okh. mat. i det. 2 no. 4:62-66 J1-Ag '57.  
(MIRA 10:9)

1. Ministr promyshlennosti predovol'stvennykh tovarov RSFSR.  
(INFANTS--NUTRITION)



ANISIMOV, V.M.; SOKOLOV, V.N.

Valuable initiative of railroad bridge workers. Put' put.khoz.  
(MIRA 17:3)  
8 no.2:38-40 '64.

1. Nachal'nik Kiyevskoy mostoispytatel'noy stantsii (for Anisimov).
2. Nachal'nik mostoispytatel'noy stantsii Belorusskoy dorogi,  
stantsiya Lida (for Sokolov).

SOKOLOV, V. N. Cand Agr Sci -- (diss) "Certain morphological and physiological  
changes in meat-<sup>fed hogs</sup>~~fattened pigs~~ <sup>at various</sup>~~on different~~ levels of general and albuminous  
feeding." Mos, 1956. 16 pp 21 cm. (All-Union Sci-Res Inst of Animal Husbandry),  
110 copies  
(KL, 7-57, 108)

54

SOKOLOV, V.N.

Efficiency of the complete utilization of sugar beets for sugar  
and feed production and its effect on the national economy. Sakh.  
prom. 36 no.9:13-16 S '62. (MIRA 16:11)

1. TSentral'nyy nauchno-issledovatel'skiy ekonomicheskij institut  
Gosplana RSFSR.

KIRYUSHINA, M.T.; SOKOLOV, V.N.

Basic characteristics of the most recent tectonics of the central  
section of the Soviet Arctic. Trudy NIIGA 135:70-182 '63.

(MIRA 18:5)

BRESLER, L.S.; KROPACHEVA, Ye.N.; PODDUBNYI, I.Ya.; SOKOLOV, V.N.

Mechanism of diene polymerization under the effect of complex catalysts based on cobalt compounds. Dokl. AN SSSR 159 no.2: 365-368 N '64. (MIRA 17:12)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut sinteticheskogo kauchuka im. S.V. Lebedeva. Predstavleno akademikom V.A. Karginym.

BABITSKIY, B.D.; KORMER, V.A.; PODDUBNYI, I.Ya.; SOKOLOV, V.N.; CHESNOKOVA,  
N.N.

Tracer method study of the stereospecific polymerization of butadiene  
in an aqueous medium in the presence of rhodium chloride. Dokl. AN  
SSSR 162 no.5:1060-1062 Je '65. (MIRA 18:7)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut sinteticheskogo  
kauchuka im. S.V.Lebedeva. Submitted November 30, 1964.

SOKOLOV, V.P., inzh.

Experience in operating and modernizing resistance-butt welding machines on the building site of the Kuybyshev Hydroelectric Power Station. Energ.stroi. no.4:18-22 '58. (MIRA 12:2)

1. Kuybyshevgidrostroy.  
(Volga Hydroelectric Power Station--Electric welding)

BOGOLOV, V. F.

BOGOLOV, V. F. "Toward the removal of urate from scheelite concentrates",  
Nauch.-inform. byulleten' (Vsesoyuz. nauch.-issled. i proyekt. in-t tekhn.  
obrabotki poleznykh iskopayem., Kh.), 1948, No. 2, p. 1-13.

SO: U-4393, 19 August 53, (Letopis 'Zhurnal 'nykh Statey', No. 22, 1949).



SOKOLOV, V. P.

25917. SOKOLOV, V. P. Bolezn' legche predupredit' chem  
lechit'. (Eor'ba s boleznyami pchel.) Pchelovodstvo, 1949,  
No. 8, p. 51-52.

No. Letopis' Zhurnal'nykh Statey, Vol. 34, Moskva, 1949

SOKOLOV, V. P.

Central NII of Geology and Mineral Raw Materials

"The beneficiation of boron-containing ores"

report presented at the 4th Scientific and Technical Session of the Mekhanobr  
Inst, Leningrad, 15-18 July 1958

SOKOLOV, V.P.

Capacitance wave recorder. Trudy Inst. okean. 35:113-117 '59.  
(MIRA 13:3)

(Waves)

Translation from: Referativnyy zhurnal, Geologiya, 1957, Nr 10,  
pp 157-158 (USSR) 15-57-10-14325

AUTHORS: Makarov, V. I., Sokolov, V. P.

TITLE: The Prospects for Developing Crushed Stone Industry  
(Perspektivy razvitiya predpriyatiy po proizvodstvu  
shchebnya)

PERIODICAL: V sb: 15-ya nauch. konferentsiya Leningr. inzh.-stroit.  
in-ta, Leningrad, 1957, pp 339-342

ABSTRACT: The industrial development of nonmetallic materials  
should be made a large-scale regional enterprise, lead-  
ing to the manufacture of a vast assortment of stone  
products. none given

Card 1/1

SKOL'NIK, G.M., inzhener; SOKOLOV, V.P., inzhener.

Preventing damage to the steam superheater. Energetik 4 no.3:  
10-11 Mr '56. (Superheaters) (MLRA 9:6)

SOKOLOV, V. P.

Subject : USSR/Engineering

AID P - 1896

Card 1/1 Pub. 29 - 1/25

Authors : Skol'nik, G. M. and Sokolov, V. P., both Engs.

Title : Experience with burning coal from the Bashkirskaya ASSR

Periodical : Energetik, no2, 1-3, F 1955

Abstract : The authors describe their two years of experience with burning of coal from the Babayevo coal field in the Bashkirskaya ASSR. The heat and power plant is equipped with unit system coal mills. The coal contains a high percentage of volatiles which requires a special structure of the furnace. Four diagrams illustrate some of the equipment used for burning the coal.

Institution: None

Submitted : No date

DULIN, I.L.; YESIFOV, P.T.; ANTONOV, N.V.; KANEV, A.I.; SOKOLOV,  
V.F.; BUGRO, Z.N.; POPOV, V., red.

[The Pechora Coal Basin in the seven-year plan; a technical  
and economic survey for 1958-1963] Pechorskii ugol'nyi bas-  
sein .. v semiletke; tekhniko-ekonomicheskii obzor za 1958-  
1963 gg. Syktyvkar, Komi knizhnoe izd-vo, 1964. 92 p.  
(MIRA 18:4)

OSMOLOVSKIY, V.V.; IOFFE, Z.M.; SOKOLOV, V.P.; DULIN, I.I.

Improvement of planning and stimulation of interest in bonuses on the part of miners (discussion of the article by A.V. Baronenkov). Gor. zhur. no.10:22-24 0 '63.  
(MIRA 16:11)

1. Krivorozhskiy gornorudnyy institut (for Osmolovskiy).
2. Dzerzhinskiy gosudarstvennyy trest zhelezorudnoy promyshlennosti, Krivoy Rog (for Ioffe).
3. Pechorskiy nauchno-issledovatel'skiy ugol'nyy institut (for Sokolov, Dulin).



LOBASHOV, K.A.; ALANOVA, T.G.; SOKOLOV, V.P.; KAZAMATKIN, Ye.P.;  
LITVINOV, N.R.; MEYMAN, S.B.; GORBYLEVA, N.V.

New methods for the deactivation of waste slurries from organic  
synthesis industries. Zhur. VKHO 6 no.2:173-180 '61. (MIRA 14:3)

(Sewage disposal) (Chemistry, Organic—Synthesis)

SOKOLOV, V.P.; LOBASHOV, K.A.

Determination of 1,2-dichloroethane in waste waters. Zav. lab.  
28 no.3:285-287 162. (MIRA 15:4)  
(Ethane) (Sewage--Analysis)

SOKOLOV, V.P.

Use of linear programming methods and electronic computers in  
the operational planning of automotive freight traffic in Tashkent.  
Vop. vych. mat. i tekhn. no.3:95-99 '64. (MIRA 18:9)

SOKOLOV, V.P.

Determination of small amounts of chlorine-containing organic substances  
by the method of thermal oxidation by atmospheric oxygen. Zhur.prikl.  
khim. 37 no.1:187-191 Ja '64. (MIRA 17:2)

POLOE, B.D., kand. veter. nauk; POLETSHIY, V.A., kand. biolog. nauk;  
SOFOROV, V.P., nauchnyy sootrudnik

Prophylaxis and diagnosis of the poisoning of bees due to chemicals.  
(MIRA 18:9)  
Veterinariia 42 no.7:70-71 J1 '65.

1. Vsesoyuznyy Institut eksperimental'noy veterinarii.

KOGAN, V.A.; OLISOV, O.A.; MINKIN, V.I.; SOKOLOV, V.P.

Structure of titanium and tin complex compounds with some  
aromatic Schiff bases. Zhur. naorg. khim. 10 no.1:85-88  
Ja '65. (MIRA 18:11)

1. Rostovskiy-na-Donu gosudarstvennyy universitet. Submitted  
July 24, 1963.

L 07493-67 EWT(1)/FCC GW/OD  
ACC NR: AT6021014

SOURCE CODE: UR/0000/65/000/000/0066/0076

33  
32  
13+1

AUTHOR: Orlov, V. P.; Sokolov, V. P.

ORG: none

TITLE: Secular variation of the geomagnetic field and its anomalies

SOURCE: AN SSSR. Institut fiziki Zemli. Nastoyashcheye i proshloye magnitnogo polya Zemli (The present and past of the earth's magnetic field). Moscow, Izd-vo Nauka, 1965, 66-76

TOPIC TAGS: secular variation, geomagnetic field, magnetic field intensity,  
*magnetic anomaly*

ABSTRACT: The authors note the following with respect to the secular variation of the geomagnetic field and its anomalies. A characteristic feature of the overall pattern of the secular variation is that the changes of the geomagnetic field strength in the Southern Hemisphere are appreciably greater in magnitude than in the Northern Hemisphere. Since about 1955 the changes of the secular variation in the Soviet Union and adjacent territories of Mongolia and China have become more pronounced than in the preceding decades. The changes of the mean annual values of the secular variation from 5-year period to a 5-year period in Eastern Siberia exceed 30 γ, reaching 45 γ in certain places. Such marked changes have not been observed in the Soviet Union in any case since 1825. The values of the secular variation in the Antarctic are much greater and the pattern of its distribution is more complex, owing to the presence

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ACC NR: AT6021014

of the center of the secular variation in the South Atlantic, than in the Arctic. At present the south magnetic pole is shifting northward and westward. In the region of Southern Africa and adjacent regions of the Atlantic and Indian oceans is a world magnetic anomaly which is manifested by low values of H. The central part of the region of low H values coincides with the focus of the negative values of its secular variation. The annual decrease of H in this region during the past 30 years was 60—80  $\gamma$ /yr for a total of more than 2000  $\gamma$ . Thus there are grounds to assume that this world anomaly owes its origin to the secular variation. Studies to elicit anomalies of the secular variation permitted the conclusion that an investigation of these anomalies can be one of the methods of studying present-day tectonic processes and the possibility is not precluded that along with other types of geophysical investigations the anomalies can be of considerable importance for forecasting earthquakes. Orig. art. has: 6 figures.

SUB CODE: 08/ SUBM DATE: 21Sep65/ ORIG REF: 007/ OTH REF: 002

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S/089/60/009/002/010/015  
B006/B056

21.6000

AUTHOR:

Sokolov, V. P.

TITLE:

The Characteristic Features of the Change in Capacity of  
Air Capacitors During Irradiation 19

PERIODICAL:

Atomnaya energiya, 1960, Vol. 9, No. 2, pp. 142-143

TEXT: In the present "Letter to the Editor", the author deals with a theoretical investigation of the radiation-induced change in capacity of a capacitor consisting of two plane, infinitely large plates. The change in capacity is, in this simple case, exclusively due to the ions produced by radiation in the air gap. First, the case is investigated, in which a constant potential difference is assumed to exist on the plates; for the purpose of deriving the relations for  $\Delta C$  and  $\Delta C_{\max}$ , the influence exerted by the ions' own electric field upon their motion is neglected. The formulas show that in irradiation in the static case, capacity grows continuously with increasing degree of ionization (from  $C_0$  to  $C_{\max}$ ).  $C_{\max}$  depends, apart from the capacitor parameters, also on the ion mobility, i.e.,

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The Characteristic Features of the Change in  
Capacity of Air Capacitors During Irradiation

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on pressure, temperature, air composition, and the nature of radiation. In the following, the author investigates the case of an alternating voltage on the capacitor plates (square pulses of moderate frequency). The diffusion of the ions and the influence exerted by their own field upon their motion is neglected. If  $d$  is much smaller than the range of the Compton electrons in the air gap, and if the plates are sufficiently thick, the degree of ionization in the spacing may considerably exceed the ionization due to primary gamma radiation (a rough estimate for practical cases shows that the secondary ionization may exceed the primary one by 10 to 100 times its amount).  $\Delta C$  may also depend on the material of the plates, and geometric anisotropy may also occur, i.e.,  $\Delta C$  may differ according to whether the radiation incides parallel or perpendicular to the plates. The results obtained by a theoretical investigation show qualitative agreement with experimental results. The author thanks B. M. Sorokin for suggesting the subject and for his help, and he also thanks A. A. Markov for revising the manuscript and for his valuable comments. There are 2 references: 1 Soviet and 1 British.

SUBMITTED: February 6, 1960

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SOKOLOV, V.P.

Determining induction coefficients of magnets of the quartz  
H-magnetometer in the Helmholtz coil. Trudy NIZMIR no.16:100-106  
'60. (MIRA 14:3)

(Magnetometer)

SOKOLOV, V.P.

Accuracy of the mean annual values D, H, Z at points of repeated  
observations. Trudy IZMIRAN no.18:108-110 '61. (MIRA 15:3)  
(Magnetism, Terrestrial)

SOKOLOV, V.P.

Field measurements of declination with a quartz H-magnetometer.  
Geomag. i aer. 2 no.3:574-575 My-Je '62. (MIRA 15:11)

1. Institut zemnogo magnetizma, ionosfery i rasprostraneiya  
radiovoln AN SSSR.  
(Magnetic measurements)

S/0203/64/004/003/0617/0619

ACCESSION NR: APL040717

AUTHORS: Adam, N. V.; Sokolov, V. P.

TITLE: Reduction of average daily values of the geomagnetic field to average monthly values in the middle latitudes

SOURCE: Geomagnetizm i aeronomiya, v. 4, no. 3, 1964, 617-619

TOPIC TAGS: geomagnetic field, latitude variation, magnetic storm

ABSTRACT: The method proposed by the authors permits a reduction of error, giving a more objective evaluation of average monthly values of the geomagnetic field. Data used for the illustration came from 11 middle-latitude observatories in the USSR for July 1958. The analysis makes use of  $\Delta$ , the average daily value minus the average monthly value. This value must contain no quiet sidereal-day variation or irregular fluctuation of magnetic storms. During July 1958 the absolute value of  $\Delta$  was found to reach 15' for declination, 165 gammas for H, and 75 gammas for Z. During disturbances and magnetic storms, the dependence of  $\Delta$  on latitude and longitude proved to be linear, but deviations in  $\Delta H$  decreased with latitude, and deviation in  $\Delta Z$  increased. The method proposed by the authors involves: 1) plotting the dependence of  $\Delta$  (for declination and horizontal and vertical field)

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ACCESSION NR: AP4040717

on latitude from magnetic data of stations, 2) determining, from the graphs,  $\Delta_2$  (deviation of  $\Delta$  from the smoothed line of the graph), and 3) determining values of  $\Delta_1$  and  $\Delta_2$  for points of field observation, computing the algebraic sum, and using the results to reduce daily values to monthly values. Determinations may be made from three stations, giving results with a possible error of  $\pm 0.2'$  for declination and 2-3 gammas for H and Z, whether for quiet or disturbed days. Orig. art. has: 3 figures.

ASSOCIATION: Institut zemnogo magnetizma, ionosfery\* i rasprostraneniya radiovoln AN SSSR (Institute of Terrestrial Magnetism, the Ionosphere, and Propagation of Radio Waves, AN SSSR)

SUBMITTED: 17Sep63

ENCL: 00

SUB CODE: ES

NO REF SOV: 005

OTHER: 000

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SOKOLOV, V.P.

Determination of styrene-maleic anhydride copolymer in waste  
waters. Zav.lab. 30 no.11:1333 '64 (MIRA 18:1)

1. Gosudarstvennyy Institut khlororganicheskikh produktov i  
akrilatov.



L 24699-66 EWT(1) RO

ACC NR: AP6015823

(A, N)

SOURCE CODE: UR/0346/65/000/007/0070/0071

AUTHOR: Poloz, D. D. (Candidate of veterinary sciences); Poletskiy, V. A. (Candidate of biological sciences); Sokolov, V. P. (Scientific worker)

ORG: All-Union Institute of Experimental Veterinary Medicine (Vsesoyuznyy institut eksperimental'noy veterinarii)

TITLE: Prophylaxis and diagnosis of the poisoning of bees by organophosphorus toxic chemicals

SOURCE: Veterinariya, no. 7, 1965, 70-71

TOPIC TAGS: insecticide, poison, toxicology, organic phosphorus compound, plant reproduction, commercial animal, horticulture

ABSTRACT: Poisoning of bees by organophosphorus compounds may occur as a result of the spraying or dusting of different nectariferous plants during their flowering period in cases where beekeepers are not advised in advance of such spraying or dusting; use of bees to pollinate vegetable crops (cucumbers, etc.) on plantations and in hothouses during the first few days following treatment of the crop with contact organophosphorus chemicals (thiophos, dithiophos, carbophos, metaphos, chlorophos, etc.); following treatment of various crops with systemic organophosphorus chemicals (mercaptopos, methylmercaptopos, octamethyl, phosphamide, etc.); and on mass contamination of nectariferous plants). Plants dusted or sprayed with such chemicals remain toxic to bees over different periods: in the case of contact

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chemicals, the danger of poisoning to bees persists for 3-5 days, and for systemic chemicals, as long as six months. Organophosphorus compounds have a neuromuscular effect based on selective depression of cholinesterase. On entering the bee organism, they disturb the functions of the central nervous system, leading to the mass death and maiming of bees, as well as to contamination of their honey with consequent danger to human health. Hence, in all cases of the mass poisoning of bees, the honey must be tested for such contamination. In this connection, the author describes an effective biochemical stain test, in which, if the organophosphorus poison is present, the cholinesterase enzyme is suppressed so that the acetylcholine added to the mixture is not dissociated and does not change the blue color of the indicator (bromothymol blue). There also exists a biological test, based on the subcutaneous injection of alcohol-water extracts of the investigated material into chicks or white mice. As for the measures to prevent the poisoning of bees by organophosphorus pesticides and insecticides, these should be as follows: treatment of crops prior to their flowering period; confinement of bees to their hives for the first 3-5 days following treatment of crops with contact chemicals; transfer of bee hives to another site 5-10 km from the site of crop treatment, if systemic chemicals are used; periodic testing of nectariferous plants for contamination by organophosphorus compounds; testing of honey and honeycombs for contamination by organophosphorus compounds in all cases of mass and sudden death of bees, in order to decide whether the honey is safe for human consumption. Orig. art. has: 1 table. [JPRS]

SUB CODE: 06, 02 / SUBM DATE: none

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SO KOLOV, V. P.

**END**